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May 14, 2001

Magalie Roman Salas
Federal Communications Commission
445 – 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: *Ex Parte* Presentation
ET Docket No. 98-142

Dear Ms. Salas:

This letter serves as notification that on May 11, 2001, Mike Kozlowski of Globalstar USA, Inc. (via telephone), Tim Cooney of Wilkinson Barker Knauer LLP (representing Globalstar USA, Inc.), William D. Wallace of Crowell & Moring, LLP, and David Weinreich of Globalstar, L.P. (representing Globalstar, L.P.) (collectively, "the Globalstar parties") had a meeting with Julius Knapp, Lisa Gaisford and Tom Mooring of the FCC's Office of Engineering and Technology ("OET"), and Howard Griboff and Trey Hanbury of the FCC's International Bureau ("IB"). Pursuant to Section 1.1206(a) of the FCC's rules, an original and one copy of this letter and attachments are being filed with your office. Please associate this letter with the file in the above-captioned proceeding.

Currently pending before the Commission in ET Docket No. 98-142 is the proposal to allocate the 6700 - 7075 MHz band on a co-primary basis to feeder link earth stations operating in the non-geostationary orbit mobile satellite service ("NGSO MSS"). The proposal conforms the U.S. allocation to the global allocation for NGSO MSS feeder links in this band adopted at WRC-95.

In the meeting, the Globalstar parties discussed the answers to technical questions raised in telephone conferences with OET and IB staff members held earlier that week and several additional points that had been addressed in the Globalstar parties' written comments and ex parte presentations submitted earlier in this proceeding. This letter summarizes the technical issues discussed in the May 11 *ex parte* meeting which relate to the pending allocation.

1. The band plan of the Globalstar MSS system and the direct "hard-wired" translation between the service uplink (1610.00 –1626.5 MHz) to the feeder downlink (6875 – 7055 MHz) were described. The Globalstar system satellites support 13 service uplink channels, each 1.23 MHz wide, in each of 16 satellite beams. These are aggregated into 16 feeder link "transponders," each 16.5 MHz wide. Eight transponders are on the left-hand circular polarization (LHCP) and eight are on the RHCP. A figure depicting this configuration will be submitted separately. Because the Globalstar system has been licensed in the U.S. to use only the 1610 – 1621.35 MHz portion of the 1610 – 1626.5 MHz band, only 9 service uplink channels can be utilized in the United States, and a corresponding portion of the 6875-7055 MHz feeder downlink is not utilized. However, the feeder link gateway earth stations may also serve countries near the U.S. that have licensed more service link channels to Globalstar. Therefore, reduction of the feeder downlink allocation may diminish the ability of Globalstar to operate on certain beams (creating coverage gaps) or the ability to operate on certain service uplink frequencies (reducing capacity) throughout the entire gateway service area which may serve international traffic. Although some Globalstar feeder link gateway earth stations may not need to operate above 7050 MHz, this would not be the case for all Globalstar U.S. gateways. If the FCC did not allocate the entire 6700 - 7075 MHz band to NGSO MSS feeder links, both the geographic coverage and capacity of the Globalstar system would be adversely affected (see No. 5 below).

2. The Globalstar system has been designed to meet the power flux density ("pfd") limits adopted by the International Telecommunication Union ("ITU"), as reflected in Table S21-4 of Article S21 of the Radio Regulations. In adopting these limits, the ITU considered the possibility of several NGSO MSS systems operating co-frequency feeder links and found that these limits provided adequate protection to both digital and analog operations of fixed services (FS) and broadcast auxiliary services (BAS). The Globalstar system has been designed to operate at the pfd limits adopted by WRC-95, and the pfd parameters cannot be changed now without degrading service to the United States.

3. When the FCC adopted the Big LEO Report & Order in 1994, the NGSO MSS service links were segmented between CDMA and TDMA systems, which cannot compatibly operate co-frequency service links. (Multiple CDMA NGSO MSS systems, on the other hand, are better able to share the same service link band.) For feeder links, it is possible for a CDMA and TDMA NGSO MSS system to share the same band, but a small amount of mutual interference will exist for infrequent, but periodic and predictable, in-line events (when a feeder link earth station and satellites from two co-frequency NGSO MSS systems all momentarily align).

4. As previously demonstrated in a Comsearch Report submitted to the Commission in this docket by the Globalstar parties in an *ex parte* letter dated February 25, 2000, 7 GHz airborne TV pickups (ATVPU) are primarily utilized by the BAS in markets where the 2 GHz band is saturated for ATVPU. This is generally only in the urban core of the largest metropolitan areas in the U.S. Because of other coordination considerations in both the feeder uplink and feeder downlink bands, it is highly unlikely an NGSO MSS feeder link station could find a suitable site in these same areas of more frequent 7 GHz ATVPU use. In other words, Globalstar (and other NGSO MSS operators) have a strong incentive to avoid urban cores and other areas with extensive use of terrestrial 7 GHz band operations. To date, we are unaware of any interference from ATVPUs into the Clifton, Texas, or Puerto Rico gateways.

5. NGSO MSS systems like Globalstar are still in the phase of early market acceptance and penetration. As such, Globalstar and other systems have deployed feeder link gateway earth stations for coverage, not necessarily maximum capacity. Currently there are only six commercial Globalstar gateways in North and Central America, including one in Texas and one in Puerto Rico. Therefore, little coverage overlap or redundancy is currently available in the Globalstar system to compensate for events such as an interfering ATVPU in the vicinity of one gateway momentarily jamming call traffic on that station.

6. To extract the maximum capacity for the current generations of the Globalstar system, it is estimated that no more than twelve gateways would be required in all of North America, with no more than six required in the continental U.S. At this stage of system deployment, it is not anticipated that another Globalstar gateway will be deployed in the U.S. for several years, with the possible exception of an installation in Alaska and the commercial conversion of the existing San Diego test facility.

7. Because of the few NGSO MSS gateways that are likely to be deployed, and because of the nature of 7 GHz ATVPU use, co-frequency operation between Globalstar feeder link gateways and BAS appears possible with the usage of basic coordination rules. ATVPUs must already coordinate with co-frequency FS, including the broadcasters' own studio links. Globalstar proposes only an extension of this current process. NGSO MSS feeder link station operators and BAS licensees (perhaps including representatives of the Society of Broadcast Engineers ("SBE")) should be required to participate in first-in-time coordination protocols to avoid and/or mitigate instances of interference. Such coordination protocols will not unduly restrict the siting of NGSO MSS feeder link stations nor unduly restrict the operational range of 7 GHz ATVPUs. The digital conversion of ATVPUs by the BAS will not be hampered and, even in the rare occurrence of 7 GHz ATVPU operations in the vicinity of a NGSO MSS feeder link stations, the 7 GHz ATVPUs can still operate on the upper two 25 MHz channels available to BAS in the 7075 – 7125 MHz band.

8. Currently, the Globalstar feeder link earth station operational parameters yield a receive band coordination distance of 145 km; however, as noted in the previously referenced Comsearch report, terrain shielding and discrimination angles can reduce the required separation distance between ATVPUs and co-frequency NGSO MSS feeder link earth stations to well below 100 km. In fact, both distance and terrain shielding are available at the Clifton, Texas, gateway to shield the earth station from potential sources of interference in the Dallas/Ft. Worth area.

Please contact the undersigned if you have any questions about the foregoing summary of the *ex parte* presentation.

Sincerely,

Timothy J. Cooney

Attachments

cc: Julius Knapp
Lisa Gaisford
Tom Mooring
Howard Griboff
Trey Hanbury

Frequency Summary

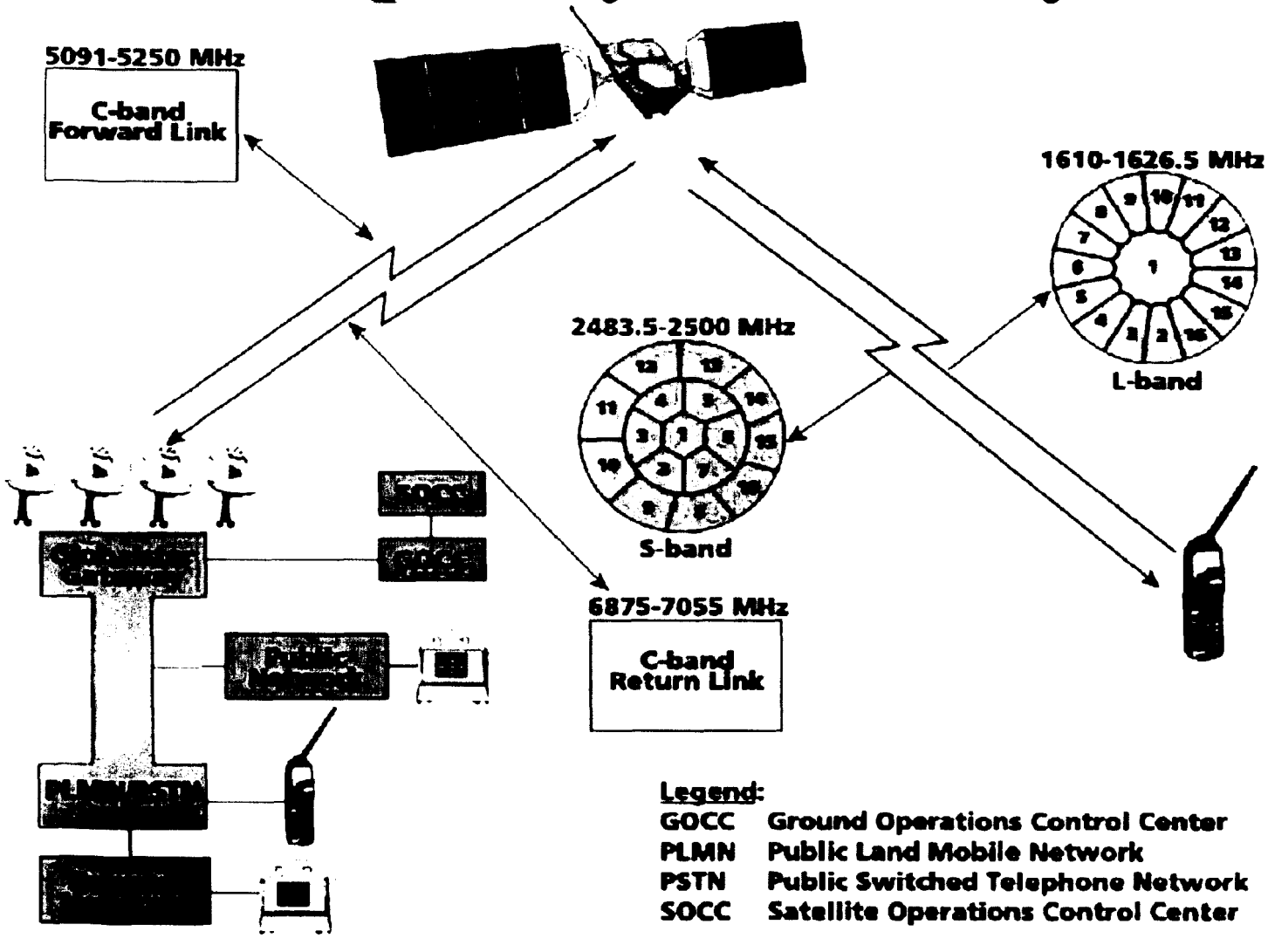

Figure A: Feeder Uplink and Downlink Frequency and Polarization Plans